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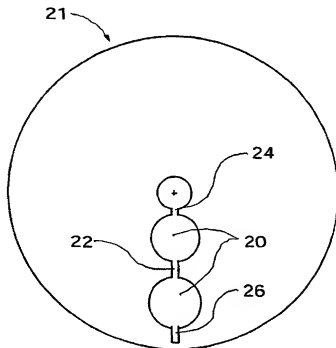
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(54) Title: POLYMER VALVES



(57) Abstract: The invention relates to a method of controlling flow of liquids in a micro channel structure. It comprises providing in said micro channel structure plugs (34) of polymer material in said structure, said polymer material in a first state blocking said channel from liquid flow, and in a second state providing a free path-way (32) for liquid flow. Energy is selectively applied so as to cause said polymer to enter a desired one of said first or second states. It also relates to a micro channel valve system, comprising a plurality of such plugs (34). Additionally it comprises a chemical reactor, comprising a plurality of micro chambers interconnected by micro channels, having a valve system according to the invention.

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